



Four-Year Estimated Graduation Rates: How do you arrive at that number?

The calculation used to determine the graduation rate takes into account student attrition in a high school over a four-year period. This is done by multiplying the class retention rates for four grades in the secondary school (9-12).

Here's an example of how it works:

Suppose you started with 100 students in their freshman year. If five did not continue their education, then the retention rate for the freshman class would have been 95 out of 100, or 95 percent.

There were then 95 students who progressed to the sophomore class. If five did not continue their education, then the retention rate for the sophomore class would have been 90 out of 95, or 94.7 percent.

There were then 90 students who progressed to the junior class. If five did not continue their education, then the retention rate for the junior class would have been 85 out of 90, or 94.4 percent.

We then had 85 students who progressed to the senior class. If five did not continue their education, then the retention rate for the senior class would have been 80 out of 85, or 94.1 percent.

By multiplying all four class retention rates ($.95 \times .947 \times .944 \times .941$), we get a graduation rate of .799, or rounded, 80 percent.

If we look at the actual number of students who did not continue their education over the four years, we would see that there were five students in each class who did not continue their education, or a total of 20 students. We started with 100 students. Twenty students did not continue their education, so the graduation rate would be $(100-20)/100 = .80$, or 80 percent. Although there is some rounding error using the product of the four retention rates, the error is minimal.

Example Calculation of an Estimated Graduation Rate				
	Freshman	Sophomore	Junior	Senior
Beginning	100	95	90	85
Left school (Dropouts)	5	5	5	5
Stayed in school (Continued)	95	90	85	80
Retention Rate	$95/100 = .95$	$90/95 = .947$	$85/90 = .944$	$80/85 = .941$
Four-Year Estimated Graduation Rate	$.95 \times .947 \times .944 \times .941 = .799$ or round to 80 percent			